OIPE
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DRILLING HEAD WITH PROTECTIVE SCREEN

FIELD OF THE INVENTION

[0001] The present invention relates to earth drilling machines having an extraction of the drilled material through an outer sleeve by injecting a pressurized air/water flow. More particularly, the present invention relates to the discharge of the drilled material and of the extraction air/water during operation of an earth drilling machine.

BACKGROUND OF THE INVENTION

[0002] Drilling machines are known and are structured to obtain vertical or horizontal holes in the ground.

[0003] Said machines are provided with a drill head which is coupled to a driver under the head[[,]] and which drives the drill rod and an outer tube (sometimes called sleeve) surrounding the drill head.

[0004] The drill rod is rotated by a motor and is pushed downwards by a translation mechanism called head carriage.

[0005] More particularly, the drill rod is typically hollow and allows the passage of air and/or water pumped under pressure inside said rod, thus obtaining a removal of the ground drilled. As a result of the pressure received from the compressor or a water pump, the air/water and the soil drilled rise to the ground surface by traveling between said drill rod and said sleeve and are then discharged from an upper aperture between the inner driver and the outer driver.

[0006] The upper aperture of the sleeve coupled to the driver, from which the drilling air/water is discharged together with the soil drilled, is located near the rotating head, which moves down along a slide by means of a head carriage.